Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of	)	
	)	
Creation of a	)	MM Docket No. 99-25
Low Power Radio Service	)	RM-9208
	)	RM-9242

To: The Commission

REPLY COMMENTS OF NATIONAL PUBLIC RADIO, INC.

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Pursuant to Section 1.415 of the Commission's Rules, 47 C.F.R. § 1.415, National Public Radio, Inc. ("NPR") hereby submits its Reply Comments in the above-captioned proceeding concerning the establishment of low power FM band radio broadcast services.[1]

Introduction and Summary

In its initial comments,[2] NPR endorsed the Commission's stated objective of promoting programmatic and ownership diversity. At the same time, NPR identified a number of significant problems in the Commission's specific proposal. In particular, NPR provided the results of a comprehensive laboratory study it commissioned with the Consumer Electronics Manufacturers Association ("CEMA") and the Corporation for Public Broadcasting ("CPB") showing the likely interference consequences associated with licensing LPFM stations without second- and third-

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[1] Notice of Proposed Rulemaking, MM Docket 99-25, RM-9208, RM-9242, 14 FCC Rcd. 2471, rel. Feb. 3, 1999 [hereinafter "NPRM"].

[2] Comments of National Public Radio, Inc., filed August 2, 1999 [hereinafter "NPR Comments"]. Unless otherwise indicated, all comment references herein are to comments filed in this proceeding.

adjacent channel and intermediate frequency protections. NPR also cautioned the Commission against proceeding without regard for the transition to in-band, on-channel ("IBOC") digital audio broadcasting ("DAB"). Further, NPR demonstrated that the Commission's proposal would have devastating consequences for the millions of Americans that receive public radio services via translator and booster facilities. Finally, NPR briefly addressed the complexity of the Commission's undertaking based on just a few of the difficult licensing and administrative issues the Commission must confront.

While the sheer volume of comments filed to date in this proceeding belies a simple characterization or response, the record largely validates the concerns NPR raised in its initial comments and the need to proceed cautiously so as not to undermine the important public service public radio affords the American people and the long-standing and substantial federal investment in public radio.

Most importantly, the technical studies demonstrate that the licensing of LPFM stations without regard for second- and third-adjacent channel protections would create significant new interference to the reception of full service broadcast stations. In particular, the separate testing and analysis sponsored by the National Association of Broadcasters ("NAB") demonstrated a likelihood of interference of the same character and degree as that found by the NPR/CEMA/CPB testing. The interim report submitted by the Commission's Office of Engineering and Technology ("OET") and a study sponsored by several supporters of low power broadcasting also confirmed the potential for interference. Those tests would have shown the true extent and likelihood of interference harm, moreover, had OET and the Broadcast Signal Lab ("BSL") established an appropriate reference point of minimum sound quality and examined a more complete range of radio receivers in the market.

Nonetheless, the technical record in this proceeding amply justifies at least retention of the existing interference protection criteria. If the Commission is inclined to view the record as debatable on the interference issue, however, the only appropriate course is for the Commission to sponsor additional testing under uniform and mutually agreed to criteria, including receiver samples, test beds, calibration and test procedures.

The record with regard to IBOC DAB also validates NPR's view that the establishment of LPFM stations at this time threatens the digital transition of the last remaining analog electronic communications medium. Both Lucent Technologies and USA Digital found a substantial likelihood of interference to their respective IBOC systems associated with the proposal to eliminate the second- and third-adjacent channel protections. At a minimum, they and others cautioned the Commission not to proceed with its LPFM initiative until the development and implementation of a definitive IBOC DAB system is assured.

The record in this proceeding confirms the substantial harm that would result if LPFM stations are permitted to displace translator and booster facilities, as the Commission has proposed. Moreover, merely grandfathering existing translators is inadequate to preserve the substantial investment in these facilities by the Federal government, state governments, and communities across the country and the services on which millions of Americans rely. The Commission should reject the suggestion to impose arbitrary distinctions in determining which translator stations to protect, such as the nature of the technology used to feed the translator's input signal.

Although a few commenters have seized this proceeding to propose yet another class of broadcast service -- FM band travelers information service ("TIS") stations -- the Commission should not pursue such an initiative. However meritorious the objective may be, the proposed

means of using FM band low power facilities is spectrally inefficient and inappropriate, as the Commission has previously concluded. There are already a variety of technical options available to transmit such services, including full service AM and FM band stations, AM band TIS stations, and Radio Broadcast Data Systems ("RBDS"). In addition, the Federal Highway Administration, the Intelligent Transportation Society of America ("ITS America") and others are aggressively developing intelligent transportation technologies that promise a far more effective and efficient dissemination of traveler-sensitive information.

Finally, while we expect supporters of low power broadcasters to dismiss out-of-hand the concerns raised regarding the Commission's proposal, the nature of the concerns and the identity and interests of those raising them do not permit a simplistic response. Even if the Commission summarily dismissed all of the concerns, however, it would still be left without any consensus in support of its proposal or any alternative one. Among those who support low power broadcasting, the diversity of views on the fundamental elements of an LPFM service may well approach the diversity of interests and perspectives of the public at large. As NPR predicted in its initial comments, the Commission faces an extreme challenge in fashioning rules to achieve its stated objectives and, based on the comments filed to date, that challenge includes marrying the disparate interests of those who support low power radio. Thus, if the Commission intends to proceed, one point is now abundantly clear: the Commission is just beginning what can only be a long process.

I. The Technical Submissions Demonstrate That LPFM Stations, As Proposed By The Commission, Are Likely To Pose Substantial Interference To Existing Broadcast Stations

Because of the Commission's failure to conduct any technical examination of the likely interference problems associated with its LPFM proposal prior to issuing the NPRM,[3] several interested parties conducted laboratory tests to examine the issue, in addition to the testing conducted by NPR, the Consumer Electronics Manufacturers Association ("CEMA"), and the Corporation for Public Broadcasting ("CPB"). On balance, this testing validates the conclusion that the wholesale elimination of second- and third- adjacent channel protections for purposes of siting LPFM stations is likely to create substantial new interference to existing services. Even the testing performed by several LPFM proponents and by the Commission's Office of Engineering and Technology ("OET") demonstrates, at a minimum, the need for further analysis, laboratory testing, and field testing.

The testing conducted by the National Association of Broadcasters ("NAB") confirms that the interference susceptibility of radio receivers has generally not improved since the FCC rules and protection standards were first developed in the 1940's.[4] Based on its testing of receiver

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[3] See NPRM, Dissenting Statement of Commissioner Furchtgott-Roth at 1.

[4] Comments of the National Association of Broadcasters, filed August 2, 1999, at 35 [hereinafter "NAB Comments"]. See also Comments of the Association of Federal Communications Consulting Engineers, filed August 2, 1999, at 5 [hereinafter "AFCCE Comments"] ("[T]he parameters which tend to suffer the most in the design of electronically-tuned receivers compared with mechanically-tuned receivers are intermodulation and image rejection, sensitivity, and ultimate selectivity.").

Predictably, the myth that radio receivers are now better able to reject interfering signals is trotted out but unsupported. See Comments of Microradio Empowerment Coalition, filed June 28, 1999, at 9 [hereinafter "MEC Comments"] ("Modern radio receivers are far superior to those of a few years ago.").

selectivity in the presence of second- and third-adjacent channel interference, the NAB study showed that receiver interference rejection performance tends to decline for strong FM signals. Consequently, if LPFM stations were allowed to operate within an existing station's service contour, the LPFM stations would cause much more interference than predicted by the use of a constant interference ratio at a station's protected contour. This testing also showed that contemporary receivers are more susceptible to co-channel interference than are older receivers.

These findings are consistent with the results of the laboratory testing commissioned by NPR, CEMA, and CPB. Like the NPR/CEMA/CPB testing, NAB's second adjacent channel tests showed that interference would occur in the majority of receivers tested when the desired-to-undesired ("d/u") ratio is as mandated under the current adjacent channel protection ratio. Thus, just maintaining the current standard is not sufficient to avoid interference. While NAB's third adjacent channel tests revealed that receiver interference was not experienced when the –40 dB d/u interference ratio was maintained, a small increase of the undesired signal ratio (just 5 dB) to –35 dB caused interference in 22 of the 28 receivers when the desired signal level was at –45 dBm.

With regard to the OET testing, we welcome the Commission's belated effort to examine the interference potential of its LPFM initiative.[5] Unfortunately, the results of OET's testing are hypothetical, inconclusive, and, by OET's own admission, require additional "follow-on" testing.[6] Simply put, new testing would be necessary to determine the extent to which, if at all, the OET study contradicts the results of the NAB and NPR/CEMA/CPB testing.

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[5] Technical Research Branch, Laboratory Division, Office of Engineering and Technology, Federal Communications Commission, Second and Third Adjacent Channel Interference Study of FM Broadcast Receivers, Interim Report (July 1999) [hereinafter "OET Preliminary Study"].

[6] OET Preliminary Study at 3.

First, OET established no minimum audio signal-to-noise ratio ("SNR") to determine what interference might be acceptable to the listening public.[7] Absent an audio reference, OET's assertion that "nearly all the receivers in the sample appear to meet or exceed the 40 dB second adjacent channel protection criterion and exceed the third adjacent channel protection criterion by a substantial margin" is, therefore, misleading.[8] OET's measurements do not represent a real world listening experience, even disregarding potential comparisons with CD players and near-CD quality MP3 online options. Moreover, they do not permit an "apples-to-apples" comparison with the test results obtained by NPR/CEMA/CPB and NAB. To be meaningful, receiver selectivity testing must be conducted with an appropriate SNR target.

Second, OET failed to include any category I radios[9] -- small, inexpensive receivers with internal antennas -- even though such radios constitute a substantial percentage of all radio receivers sold annually.[10] Indeed, such receivers constituted more than a quarter of the 710 million receivers sold in the United States in 1998.[11] Unless the Commission is prepared to

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[7] By contrast, the NAB testing used an SNR of 50 dB, based on the International Telecommunications Union-Radiocommunications (ITU-R) Recommendation 641. The 50 dB RMS (root-mean-square) audio SNR targeted by NAB is equivalent to the 45 dB weighted quasi peak (WQP) SNR used in the NPR/CEMA/CPB testing.

[8] OET Preliminary Study at 3.

[9] Id. at 5.

[10] See Comments of the Consumer Electronics Manufacturers Association, filed August 2, 1999, at 10.

[11] See id. at 9. The Chairman's recent comment that "[o]ur study used a wide range of inexpensive radios" appears to overlook the fundamental omission of category I receivers. See "A New Tomorrowland", Speech of William E. Kennard, Chairman, Federal Communications Commission, before the National Association of Broadcasters, September 2, 1999, Orlando, Florida (as prepared for delivery), available at http://www.fcc.gov/Speeches/Kennard.

consign the listening public to significantly degraded reception via personal/portable radio receivers, such as Walkman-type radios, it cannot simply ignore this category of receiver equipment.[12] Improving the reception capabilities of such receivers is also not a realistic option both because the Commission historically has refused to mandate radio receiver equipment interference immunity standards,[13] and manufacturers understandably are unlikely to devote substantial resources to improving the reception capabilities of their least expensive receiver equipment.

The testing conducted by Broadcast Signal Lab ("BSL") on behalf of several LPFM advocates was claimed to relate radio performance to the FCC protection ratios in two ways.[14] First, car radios and higher priced radios were said to perform far better than one would have predicted based on the FCC interference ratios. Thus, substantial signal strengths were required to cause second-, third-, and fourth-adjacent channel interference. Second, the performance of lower priced radios tended to "straddle," in the words of BSL, the FCC ratio reference levels. BSL also concluded that higher priced radios and car radios tolerated fourth adjacent channel signals by a considerable margin above the FCC interference ratio reference levels for third adjacent channel signals. BSL claimed that there was no decrease in interference susceptibility as adjacency increased from second to third to fourth.

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[12] In fact, these types of radio receivers are among the least tolerant of interference. See NPR Comments, Attachment D (Statement of Robert D. Culver, P.E.) at 7.

[13] See In the Matter of FM Broadcast Stations Blanketing Interference, 57 R.R.2d 126, 130 (1984) (declining to adopt or require blanketing interference immunity standards).

[14] National Lawyers' Guild Committee on Democratic Communications, Receiver Evaluation Project, dated June 30, 1999 [hereinafter "BSL Study"].

For a number of reasons, the BSL testing is, at best, flawed, and otherwise supportive of the conclusions found in the NAB and NPR/CEMA/CPB testing.

First, like the OET testing, BSL's failure to establish a definition of acceptable audio quality substantially diminishes the relevance of the testing. Suggesting that a radio receiver is operating acceptably because the audio quality has not reached a total "point of failure" is easily justifiable with test results,[15] but adds nothing to the discussion of whether and how the Commission should proceed with its LPFM initiative. It is difficult to draw any correlation from the test results obtained by BSL to other study results without qualitative assessment referenced to engineering science, and susceptibility of the FM receivers tested simply cannot be determined absent an audio SNR standard of service.[16] Likewise, instead of using recognizable terminology to describe the performance of receivers tested, BSL stated that "performance of lower priced radios tended to 'straddle' the FCC ratio reference levels." It is unclear, in either engineering terms or otherwise, what "straddle" means to a listener and if the interference renders the resulting signal undesirable to the listener.

Second, close examination of BSL's testing raises numerous questions about the test bed used, the calibration of test equipment, and the test methodology. For example, BSL did not

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[15] For instance, BSL stated that substantial signal strengths were required to cause adjacent channel interference to car radios and higher priced radios without defining the level or nature of the interference. BSL Study, Executive Summary, at 1.

[16] The procedure for qualitative assessment of perceived impairment of a receiver audio is well established in domestic television and radio and well documented in international broadcasting. NPR's target SNR of 45 dB WQP equates roughly to Grade 3 (Slightly annoying) according to International Telecommunications Union (ITU) subjective evaluation guidelines. L.C. Middlecamp, Subjective Evaluation of Audio Degraded by Noise and Undesired FM Signals 12 (November 17, 1982). It is comparable to the transmission quality proof of performance standard the Commission previously required of AM stations and worse than the standard for FM stations. See NPR Comments at 13 & n.35; 47 C.F.R. §§ 73.40(a) , 73.617(a) (1984).

specify whether noise measurements and Total Harmonic Distortion ("THD") measurements were made using RMS or Quasi Peak detectors. There was no mention of audio monitoring being used to listen to the noise (interference) while adjusting the undesired signal. These methodological flaws, like the failure to specify a target audio quality threshold, makes it impossible to correlate the test results to actual listening.

Third, BSL's tests demonstrated that even the best receivers showed measurable increases in distortion in the presence of extremely low level undesired signals. Yet, BSL simply asserts that it is "clearly inappropriate to define this measurable degradation as interference."[17]

Fourth, in summarizing its findings, BSL noted that with fourth adjacent interference, the laws of physics do not always apply as predicted when testing various receivers. One would expect that as the undesired signal is progressively moved away from the desired signal by 200 kHz increments, the effect of the interference would be diminished at all d/u ratios for a given power level. However, BSL's testing concludes that interference can occur on any adjacent channel and, among the receivers tested, "could as well be from the third or fourth adjacency as the second."[18]

Fifth, BSL testing supported NPR's position on the modulation penalty. In its comments, NPR noted the particular interference susceptibility of "lightly processed" programming, such as

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[17] If the point of the exercise was to measure the likelihood of harmful interference, there is no excuse for refusing to assess whether the interference that occurred is harmful. While "actual FM listening conditions are dependent on such variables as reception conditions, baseline radio performance without interference, and the various sounds and effects that interference can create," those factors require extrapolation of the laboratory results; they do not justify refusing to assess the interference that occurred in the laboratory. See BSL Study, Executive Summary, at 1.

[18] BSL Study, Executive Summary, at 1.

classical music, jazz, talk, and public affairs programming.[19] BSL also noted that interference from the undesired signal was dependent on the type of modulation.[20]

In the final analysis, NPR believes that the NPR/CEMA/CPB testing, and the testing conducted by the NAB, amply justify discarding the proposal to authorize LPFM stations without regard for second- and third-adjacent channel protections and the intermediate frequency taboos. If the Commission intends to proceed, however, we believe the Commission must sponsor additional testing with the participation of expert observers from each interested party and, possibly, field testing. The FCC currently participates in a model for such an undertaking -- the National Radio Systems Committee ("NRSC"), which has subgroups working on myriad technical issues confronting the radio industry. The NRSC provides a forum for broadcasters, manufacturers, policy makers, and other interested parties to participate in an iterative decision-making process. This process has led to several voluntary technical standards as well as FCC recommendations designed to improve the quality of radio.

While the Commission is anxious to proceed with its LPFM initiative, every other aspect of its proposal is secondary to the issue of whether the establishment of new classes of LPFM stations will substantially undermine the existing services of full service stations and whether LPFM stations themselves will be able to provide service without suffering harmful interference. Therefore, to the extent the Commission intends to proceed based on its current engineering

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[19] See NPR Comments at 13 n.34.

[20] BSL stated that "[t]he performance of the lower priced radios was more dependent on type of modulation of the undesired signal, type of radio and adjacency under test." BSL Study, Tab 2, at 15. To the extent the Executive Summary of the BSL Study suggests the absence of a relationship between modulation and interference, it is contradicted by the BSL Study itself.

proposals, standardized testing or re-testing with uniform receiver samples, test beds, and calibration and test procedures is essential.

II. Based On The Evidence To Date Regarding The Development Of An IBOC Transmission Standard, The Only Appropriate Course Is To Defer Initiating Any LPFM Service Until The Implementation Of IBOC DAB Is Assured

In our initial comments, NPR cautioned the Commission that the transition to digital audio broadcasting ("DAB") is too important to undermine, however unintentionally, as the result of the establishment of new low power broadcasting stations. The Commission's low power initiative comes at a crucial time in the development of a definitive In-band, On-channel ("IBOC") DAB solution. The proponents of the competing IBOC transmission systems are currently field testing and refining their technology in anticipation of reporting the results of that testing by December 15, 1999. For these reasons, the only appropriate course is to defer initiating any new low power services not based on existing broadcast engineering principles and protection criteria, until the development and implementation of IBOC DAB is much farther along.[21]

Significantly, in response to the Commission's express call to the proponents of IBOC DAB systems to comment on this issue, both Lucent and USA Digital Radio ("USADR") have urged the Commission to refrain from proceeding in a way that would interfere with the development and implementation of IBOC DAB.[22] Moreover, both express significant doubts

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[21] Even if the IBOC testing may extend beyond the December deadline, the apparent concern over that possibility is irrelevant. See Media Access Project, Notice of Ex Parte Presentation, filed Aug. 27, 1999. If the Commission wishes to authorize LPFM based on existing engineering protection criteria, it can, as far as NPR is concerned, do so without regard for IBOC DAB. What is inappropriate is the elimination of important interference protections based on inadequate testing and in the face of a digital transition predicated on the existing standards.

[22] Comments of Lucent Technologies, Inc., filed August 2, 1999, at 10-11 [hereinafter "Lucent Comments"]; Comments of USA Digital Radio, Inc., filed August 2, 1999, at 4-5 [hereinafter "USADR Comments"].

about the feasibility of implementing IBOC DAB while establishing new low power stations through the wholesale elimination of second- and third-adjacent channel protections. According to Lucent:

> The analysis that we have conducted to date, while not complete, leads us to be pessimistic about the effects of permitting low power FM stations on adjacent channels. Our analysis suggests that it will be difficult for additional low power analog and new digital IBOC signals to co-exist and serve their intended service areas. The Commission's proposals generally either will constrain the capability of an IBOC system to replicate each station's analog service area with a digital audio signal during a transition period, or the digital signal will cause interference to the analog LPFM signal in a portion of that station's service area.[23]

Just as ominously, USADR reports that "[e]liminating the requirement that LPFM stations comply with existing second adjacent channel interference protections will create new and more significant instances of interference for DAB."[24] Moreover, while IBOC DAB offers the promise of ancillary data services, the Commission's proposed LPFM service threatens to "severely compromise" that capability, thereby "eliminat[ing] a significant opportunity to . . . upgrade existing subcarrier services," such as the many services NPR Member stations provide to the print disabled.[25]

Despite the Commission's stated intention to launch a rulemaking proceeding regarding digital radio this summer,[26] it appears that the initial notice, comment, and reply comment cycle

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[23] Lucent Comments at i.

[24] USADR Comments at 6.

[25] Id. at 9-10. See Supplemental Comments of the International Association of Audio Information Services, filed August 2, 1999, at 4 ("[T]he vast majority of radio reading services are associated with public radio stations.") [hereinafter "IAAIS Comments"].

[26] See In the Matter of Creation of a Low Power Radio Service, MM Docket No. 99-25, at ¶ 6 (rel. May 20, 1999) (Order Granting Extension of Time).

will not take place until sometime later this year, at the earliest. While we understand the Commission's desire to proceed with its LPFM initiative promptly, it alone is in a position to commence an IBOC DAB proceeding, and the Commission simply cannot proceed with the LPFM initiative without accommodating the development and implementation of IBOC DAB or making a determination that IBOC is not in the public interest.[27] Given the merits of digital technology, the digital transformation of every other form of electronic communications, the Commission's contemporaneous treatment of the digital television transition,[28] and the Commission's prior support for digital radio,[29] the choice between proceeding with or without regard for IBOC DAB is no choice at all.

III. The Establishment Of LPFM Stations On A Primary Basis Threatens To Eliminate Public Radio Service Provided By Translator and Booster Facilities To Millions of

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[27] Given the technical challenges to developing an IBOC DAB standard based on current FCC engineering standards, deferring consideration of IBOC DAB until after the Commission substantially relaxes those standards and authorizes new LPFM stations is tantamount to an affirmative determination not to pursue IBOC DAB.

[28] See NAB Comments at 43-44 (recounting the Commission's efforts to assure the future integrity of the television broadcast spectrum, including by freezing the television Table of Allotments in 1987, in advance of the adoption of a new digital television standard in 1996).

[29] For instance, the Commission previously declared:

> We continue to support efforts to implement terrestrial in-band [digital audio radio services] DARS technology. We believe that existing radio broadcasters can and should have an opportunity to take advantage of new digital radio technologies, and we are optimistic that technical advances will, in the near future, permit both FM and AM broadcasters to offer improved digital sound. To this end, we are committed to continuing our work with the broadcast industry to ensure that broadcasters are able to promptly implement terrestrial DARS.

Amendment of the Commission Rules With Regard To The Establishment And Regulation Of New Digital Audio Radio Services, Notice of Proposed Rulemaking and Further Notice of Inquiry, GEN Docket No. 90-357, 7 FCC Rcd 7776, 7778 (1992).

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In its initial Comments, NPR demonstrated that authorization of LPFM stations on a primary basis would threaten the public radio service that more than 9 million Americans receive via translator and booster facilities.[30] As a technical matter, the elimination of second- and third-channel adjacency protections is likely to cause interference to the input and output signals of FM translator stations.[31] Aside from unintended interference, moreover, the establishment of LPFM stations on a primary basis would mean the elimination of translator and booster facilities wherever any applicant established an LPFM station.[32]

Particularly in the case of public radio, such a result is clearly contrary to the public interest. Over the past four decades, the Federal government, state governments, and local communities across the country have devoted considerable resources to the extension of public radio service via translator and booster facilities to unserved and underserved areas.[33] These facilities provide the only public radio service in many areas of the country, and, in some areas, the only radio service.

For these reasons, the Commission should reject out-of-hand the proposal to permit LPFM stations to displace translator and booster facilities.[34] As NPR demonstrated in its initial

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30 See NPR Comments at 23.

31 Id. See also Comments of the National Translator Association, filed August 2, 1999, at 3 ("NTA members who operate translators report frequently having experienced problems with interference to the input signals for their translators from new translators installed in the same area by unrelated parties.").

32 See NPR Comments at 23.

33 See id. at 24-27.

34 See NPRM at ¶ 29 (proposing to authorize 1000 watt LPFM stations on a primary basis;

comments, moreover, merely "grandfathering" existing translator and booster facilities is inadequate because the presence of primary LPFM stations will make it difficult, if not impossible, to find new sites when translator and booster facilities are inevitably displaced by full service stations.[35]

Finally, the Commission should reject calls to adopt arbitrary distinctions among translators and boosters, such as the technology used to feed the facility's input signal.[36] Neither

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id., Appendix D (assessing the quantitative impact of authorizing 100 watt LPFM stations on a primary basis).

Based on the flatly erroneous premise that translators were originally established only to provide fill-in service, one group of joint commenters asserted that "no existing translators should be 'grandfathered in' and that all frequencies that translators reside on [sic] may be applied for by LPFM applicants." Comments of the American Civil Liberties Union of Massachusetts, Radio Free Allston, and the Citizens' Media Corps, filed June 3, 1999, at 10 [hereinafter "Comments of the American Civil Liberties Union of Massachusetts et al."]. In fact, the Commission originally authorized translator service both to fill-in and extend the signals of full-service stations. Amendment of Part 74 of the Commission's Rules and Regulations to Permit the Operation of Low Power FM Broadcast Translator and Booster Stations, Docket No. 17159, 20 Rad. Reg. 2d 1538 (1970). Moreover, the Commission has long encouraged noncommercial translators to extend the signals of full-service noncommercial stations. See id. at ¶ 6 (declining to apply ownership or financial restrictions on noncommercial translators that extend a full-service station's signal); In the Matter of Amendment of Part 74 of the Commission's Rules to Provide for Satellite and Terrestrial Microwave Feeds to Noncommercial Educational FM Translators, 4 FCC Rcd. 2487 (1989) (authorizing noncommercial FM translator stations assigned to reserved channels and owned and operated by their primary stations to receive signals for rebroadcast via satellite or any other technical means).

[35] See NPR Comments at 26. See also Joint Comments of National Public Radio, Inc., The Association of America's Public Television Stations And The Corporation For Public Broadcasting, Reexamination Of The Comparative Standards For Noncommercial Educational Applicants, MM Docket No. 95-31, at 35, filed Jan. 28, 1999 [hereinafter "Joint Comparative Standards Comments"].

[36] Comments of the National Federation of Community Broadcasters, filed August 2, 1999, at 12-13 [hereinafter "NFCB Comments"] (proposing to distinguish between terrestrially-fed and satellite-fed translators because the latter "do not deliver a local program service"). Compare NPR Comments at 27 (describing the local program service afforded by satellite-fed translators in Colorado).

technology nor distance alone can determine what programming is responsive to the interests and needs of a particular community and is otherwise in the public interest. If the Commission is prepared to sacrifice translator service in the interest of its LPFM initiative, the public interest requires a qualitative comparative assessment to resolve any instances of mutual exclusivity between existing translator or booster service and a proposed LPFM service.[37] While such an undertaking would require a commitment of resources by the Commission to develop and apply the relevant criteria, that cost is attributable to, and justified by, implementing the Commission's LPFM initiative in a manner that promotes, rather than undermines, the public interest.

IV. The Commission Should Not Establish A Class Of FM Band Low Power Traveler Information Service Stations, As A Few Well-Intentioned Commenters Propose

Several commenters have used the opportunity of this proceeding to propose the establishment of a travelers information service ("TIS") in the FM band.[38] While it is difficult to question the objective of providing the traveling public with timely traffic, emergency, and other information, that objective is well beyond the stated purpose of this proceeding to increase programmatic and ownership diversity among broadcast stations. Moreover, a low power FM band traveler information broadcast service is spectrally inefficient and likely to create substantial new interference to existing broadcast services. Further, the proponents of this new broadcast service have not demonstrated that the existing options of disseminating this information are

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[37] The criteria used to differentiate among new full-service broadcast proposals would provide a useful starting point. See Joint Comparative Standards Comments at 35.

[38] Comments of the Port Authority of New York and New Jersey, filed July 29, 1999; Comments of the International Bridge, Tunnel and Turnpike Association, filed July 29, 1999 [hereinafter "IBTTA Comments"]; Comments of the Texas Department of Transportation, filed May 28, 1999 [hereinafter "TxDOT Comments"]; Comments of the New York State Thruway Authority, filed August 2, 1999 [hereinafter "NYSTA Comments"].

inadequate. Finally, there are alternative means of delivering this information in place and on the horizon that do not require the diversion of scarce FM band spectrum.

When the Commission first authorized AM TIS stations, it considered and rejected the use of FM band spectrum to transmit such services. "Because FM stations provide wide area coverage, it would not be feasible to transmit simultaneous travelers information repetitively for several local areas."[39] While lower powered stations would transmit to smaller coverage areas, the proponents of this new broadcast service seek to transmit with as much as 100 watts of effective radiated power.[40] Such facilities remain an inefficient use of the FM spectrum both because the ratio of service area to interference area is much lower than for full power stations[41] and because a TIS service would have to employ many stations and considerable spectrum to canvass the many thousands of miles of intrastate and interstate roadways.

While the proponents of the FM TIS service attempt to minimize the likely disruption to existing broadcast services, they have not advocated establishing the service on a non-interfering

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[39] Amendment of Parts 2 and 89 of the Rules to Provide for the Use of Frequencies 530, 1606, and 1612 kHz by Stations in the Local Government Radio Services for the Transmission of Certain Kinds of Information to the Traveling Public, 67 F.C.C.2d 917, at ¶ 27 (1977).

[40] See TxDOT Comments at 2; NYSTA Comments at 9.

[41] As the Commission previously has explained:

> The ratio of service area to interference area is not a constant. Because of the way radio signals propagate, and the way service and interference are determined, the proportion of the region receiving service would be greater if higher powered stations were established. Permitting low power facilities . . . would lead to a larger number of stations but less overall service. Simply put, full power broadcast facilities are more spectrally efficient.

Application for Review of Stephen Paul Dunifer, 11 FCC Rcd 718, at ¶ 17 (1995).

basis. Thus, the Texas Department of Transportation supports the elimination of second and third adjacent channel interference protections and permitting FM TIS stations to receive interference to as much as 10 percent of their predicted coverage area.[42] Moreover, if the population density within the area served by the New York State Thruway is at all representative of the density of listeners likely to suffer interference as a result of the proposed new class of service, the harm would be profound.

> The Thruway stretches from the New York City metro area to Buffalo; a majority of the State's 62 cities (including the nine largest) are located within the Thruway corridor, which contains more than 80 percent of the State's population and registered motor vehicles.[43]

Given the heightened interference concerns associated with introducing new low power stations in the reserved portion of the FM band,[44] the Commission should reject the suggestion that it authorize the new class of FM TIS stations, either exclusively or in part, in that portion of the FM band.[45]

Even putting aside interference considerations, the proponents of this new broadcast service have not demonstrated the need for an FM band service either in addition to or in lieu of

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[42] TxDOT Comments at 3, 4. See also NYSTA Comments at 10 (proposing to "minimize," but not avoid, interference to second and third adjacent channels).

[43] NYSTA Comments at 1-2.

[44] See NPR Comments at 17-21.

[45] TxDOT Comments at 3. At least one of the commenters recognizes that the proposed service would not qualify as a noncommercial educational service under the Commission's long-standing requirements. See NYSTA Comments at 3-4. With regard to the suggestion that the Commission license tax exempt organizations without regard to the entity's exempt purpose, the Commission long ago concluded that such a seemingly simple change "represents the most profound departure from past practice and the premises on which other agencies and the Congress have acted." NCE Licensee Eligibility, 43 Fed. Reg. 30,841, 30,843 (1978). See NPR Comments at 29-30.

existing options. As an initial matter, many full service AM and FM stations offer up-to-the-minute traffic, weather, and other travel related information. Since the greatest radio listening occurs during morning and evening commuting, existing stations already have a significant incentive to provide useful and timely information. In addition, existing AM-band TIS services already provide the same services touted by the FM TIS proponents. As the Commission has previously found:

> Our experience with TIS operation in the AM band has been very satisfactory. Its location in the AM band does not appear to discourage its use. On the contrary, as a service unique to the AM band it may have some benefit in encouraging listeners to explore what other programming is being provided there.[46]

To the extent the existing service of AM band TIS stations may be less than satisfactory,[47] there are significant reasons why an FM band service will not provide a meaningful improvement. As the commenters appear to recognize, automotive travelers are unlikely to switch from TIS station to TIS station every few miles as they exit and enter the stations' service areas. Thus, they propose, variously, the use of translator or booster facilities,[48] the licensing of contiguous groups of stations,[49] and the waiver of any station ownership limits the Commission may otherwise impose.[50] There is no practical alternative, however, to authorizing FM TIS stations on multiple channels to serve a roadway of any appreciable distance, given the acute scarcity of available FM

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[46] Review of the Technical Assignment Criteria for the AM Broadcast Service, 6 FCC Rcd. 6273, at ¶ 200 (1991).

[47] See NYSTA Comments at 2.

[48] TxDOT Comments at 4.

[49] NYSTA Comments at 10.

[50] Id. at 7-8; TxDOT Comments at 5; IBTTA Comments at 2.

band spectrum, particularly in urbanized areas where travel related information is ordinarily most useful. Thus, the Commission can only authorize a new service of FM TIS stations based on the flawed assumption that automotive travelers will continuously re-tune their radio receivers every few miles in search of a quality TIS signal.

We are also confounded by the proposal to excuse FM band TIS stations from participating in the Emergency Alert System ("EAS"). As the commenter explains it:

> [T]hese stations will not have the coverage area, audience or finances to comply with this operation. Also, they will likely not be the station serving the whole community of listeners, thus may be excused by other, more powerful stations taking on the role of emergency alerting in the community.[51]

With all due respect, it is difficult to reconcile establishing a broadcast service devoted to disseminating public safety information to automotive travelers with the understanding that listeners will have to switch to a full service station when they most need public safety information.

To the extent existing TIS services can and should be improved, NPR has long supported the development of new radio technology that would deliver new and additional information and public safety services. Thus, NPR has supported efforts by the Federal Highway Administration ("FHA") to develop radio technology to address our nation's burgeoning traffic problems.

Moreover, the Intelligent Transportation Society of America ("ITS America") is a public-private partnership dedicated to making the United States surface transportation system safer and more effective by accelerating the development, integration, acceptance, and deployment of advanced technology. ITS America's members are stakeholders in the application of new

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[51] TxDOT Comments at 5.

technology and have been very involved in analyzing and coordinating capabilities for in-vehicle traffic information systems.

NPR has supported ITS America's efforts by participating in inter-industry standards setting meetings to select a preferred high-speed data standard for use in the transmission of Advanced Traveler Information Systems ("ATIS") messages over FM subcarriers. The use of high-speed data technology through existing radio stations as a way to provide traffic information on a regional, state or national basis is both efficient and practical. Networks of new transmitters and associated frequency coordination would not be required, and the coverage would mirror that of existing stations.

NPR and its member stations have also played a leading role in deployment of Radio Broadcast Data Systems ("RBDS") in the United States.[52] One of the features of RBDS is the ability to provide traffic announcements ("TA") and emergency ("PTY31") alerts. The traffic program code turns on a front-panel "flag," or visual indicator, alerting the driver that the tuned radio station transmits traffic announcements. In the event of an announcement, the driver may override a CD or audio cassette player or radio station programming in order to receive traffic information. Since RBDS technology enables an FM station to transmit text separately from its audio signal, existing full service FM stations can already utilize that technology to alert motorists to weather, traffic, or other important developments or refer them to an existing AM- band TIS frequency.

In sum, notwithstanding the publicly beneficial purpose underlying the proposed new

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[52] For instance, a number of NPR Member stations were among the first to deploy the technology. See "I Want My 'Smart' Radio," PR Newswire, Financial News, June 27, 1994; Communications Daily, June 17, 1994, at 7. A listing of the hundreds of stations that now offer RBDS services can be found at http://www.cemacity.org/rds/.

broadcast service, constructing networks of low-power FM-band TIS stations, including on NCE reserved channels, is neither a necessary nor an efficient means of disseminating travel advisory information. We therefore urge the Commission to continue its long-standing support for AM band TIS services, to support the development of new and complementary services such as RBDS and ATIS, but to reject the proposal to establish a new service of FM band TIS stations.

V. Assuming The Commission Elects To Proceed With Its LPFM Initiative, There Is No Consensus Among The Commenters In Support Of Either The Specific Proposal Put Forward By The Commission Or An Alternative One

Among the commenters in this proceeding, an overwhelming number urge the Commission not to proceed with its LPFM initiative for significant reasons:

- the likelihood of harm to existing broadcast services, including radio reading services, services provided via auxiliary translator and booster facilities, and services provided outside of traditionally protected contour areas, and to the IBOC DAB transition[53]
- the cost of implementing the various classes of LPFM stations and enforcing the applicable administrative, technical, content, and other Commission rules and policies[54]
- the difficulty of selecting LPFM licensees to achieve the Commission's stated objectives in light of Constitutional, statutory, policy, and practical considerations[55]
- the continuing emergence of the Internet as a far more appropriate medium for achieving the Commission's objectives without the need for any Commission oversight

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[53] E.g. NAB Comments at 41-48, 58-64 (harm to radio reading services, auxiliary broadcast services, service beyond protected service contours, and IBOC); IAAIS Comments at 6-9 (harm to radio reading services); Comments of The Rocky Mountain Corporation for Public Broadcasting, filed August 2, 1999, at 4-5 (harm to auxiliary broadcast services); Comments of Sacred Heart University, filed August 2, 1999, at 5-9 (harm to auxiliary broadcast services); Comments of the Public Radio Regional Organizations, filed August 2, 1999, at 5-13 (harm to radio reading services, auxiliary broadcast services, service beyond protected service contours, and IBOC) [hereinafter "PRRO Comments"].

[54] NAB Comments at 64-77; PRRO Comments at 25-28.

[55] NAB Comments at 78-81; PRRO Comments at 14-17.

or regulation[56]

While supporters of the Commission's LPFM initiative will undoubtedly characterize these commenters and concerns as veiled attempts to prevent others from obtaining the FM broadcast means of self and community expression, such a characterization is too simplistic to withstand more than passing scrutiny. Indeed, commenters expressing doubts about the wisdom of the Commission's proposal range from existing broadcasters -- commercial and noncommercial, religious and secular, large and small, minority owned or oriented and otherwise,[57] to the broadcast engineering community,[58] to those with an interest in broadcasting but not in incumbent broadcasters.[59]

However, even if the Commission summarily dismissed those comments it attributes to existing broadcast interests or opponents of low power broadcasting, it would find no consensus

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[56] NAB Comments at 8-10.

[57] See id.; PRRO Comments; Comments of the Station Resource Group, filed August 2, 1999; Comments of the National Religious Broadcasters, filed August 2, 1999; Joint Comments of the Named State Broadcasters Association, filed August 2, 1999; Comments of Minority Members of the North Carolina Association of Broadcasters, filed August 2, 1999; Comments of Hispanic Broadcasting Corporation, filed August 2, 1999; Comments of Z-Spanish Media Corporation, filed August 2, 1999.

[58] See AFCCE Comments; Comments of du Treil, Lundin & Rackley, Inc., filed August 2, 1999.

[59] E.g. Comments of the Corporation for Public Broadcasting, filed August 2, 1999, at 2 ("We stress -- and we hope it is clear -- that CPB has no vested interest in whether the public is served by incumbent or new noncommercial radio stations. We are not defending the economic status quo, nor are we motivated by a desire to protect those who already hold radio licenses. Our charter sets for us a different course: seeing that the entire public is well-served by public radio."); Lucent Comments at i ("Lucent approaches the technical issues related to low power FM solely from the perspective that the effect of any changes to the Commission's technical rules governing FM service must not preclude the ability of broadcasters to initiate digital broadcasting in a consumer-friendly manner.").

among the remaining commenters in favor of its LPFM proposal or any alternative version. At the most basic level, there is no consensus on how many classes of LPFM stations should be authorized and what the respective power levels should be. Thus, competing proposals dispute the number of classes of LFPM stations, the transmission power levels, and antenna heights.[60] While there is apparently overwhelming opposition to the Commission's proposal to establish a class of 1000 watt stations in favor of lower power stations,[61] there are those who advocate just such a class.[62]

With regard to the potential ownership and administrative rules, there are proposals for

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[60] See, e.g., Comments of the American Civil Liberties Union of Massachusetts et al. at 2 (supporting 100 watt and 1-10 watt stations; no mention of HAAT); Revised Comments of REC Networks, filed May 10, 1999, at 6-13 (proposing 5 classes of stations ranging in power from 10 watts to 1000 watts, in HAATs from 10 meters to 60 meters, and in availability depending on market size); Comments of Civil Rights Organizations, filed August 3, 1999, at 19 (proposing 50 watt "urban" and 100 watt "rural" stations; no mention of HAAT); NFCB Comments at 12 (supporting three power ratings (1000 watt, 100 watt, and 10 watt) within one primary service class); Comments of J. Rodger Skinner Jr., filed July 29, 1999, at 9 [hereinafter "Skinner Comments"] (proposing 2 services: 1000 watt primary stations with a maximum HAAT of 100 meters and 100 watt secondary stations); Reply Comments of WKJCE Radio, filed Sept. 5, 1999, at 4 (proposing 100 watt, 250 watt, and 500 watt stations allocated according to population density).

[61] As articulated by the Amherst Alliance:

> We have spent considerable time and energy speculating WHY the Commission has proposed the licensing of LP-1000 stations, WITHOUT geographical limits, when virtually no one in the Low Power Radio movement ever ASKED for them. Apart from Rodger Skinner and a few others, NO ONE in the movement asked for more than 250 watts -- and most of the 'players' asked for 100 watts or less.

Additional Comments of The Amherst Alliance, filed June 12, 1999, at 43.

[62] See Comments of The George Washington University, filed July 10, 1999, at 1 (promoting itself as an ideal candidate for a 1000 watt LPFM license).

noncommercial-only service,[63] noncommercial and commercial services,[64] noncommercial and commercial services with a distinct preference for noncommercial service,[65] noncommercial service and possibly commercial service,[66] noncommercial service but with the ability to broadcast

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[63] Revised Comments of REC Networks at 17 (proposing a noncommercial service to avoid the statutorily mandated auctioning of mutually exclusive commercial applications); Comments of the Alliance for Community Media, filed August 2, 1999, at 7 ("support[ing] only non-commercial use of the low power FM licenses").

The Intercollegiate Broadcasting System favors the establishment of a noncommercial LPFM service only within the reserved portion of the FM band on the cynical grounds that "[t]his should effectively limit opposition of commercial FM broadcasters." Comments of the Intercollegiate Broadcasting System, Inc., filed August 2, 1999, at 2 [hereinafter "IBS Comments"]. The IBS also opines that use of the reserved portion of the FM band would "provide a means of practical applications within a band whose listeners have learned to expect diversity." Id. at 2. One might have expected an organization whose noncommercial broadcast members operate on frequencies throughout the FM band to know that noncommercial broadcast stations, and the diversity "listeners have learned to expect," may be found anywhere on the FM dial. Moreover, with regard to the comment that "NPR stations currently operate with budgets generally exceeding $100,000 per year," id. at 2, IBS might be interested to know that the FCC's rules define as a "small business" any radio broadcasting station with less than $5 million in annual receipts. See Implementation of Section 309(j) of the Communications Act -- Competitive Bidding for Commercial Broadcast and Instructional Television Fixed Service Licenses, MM Docket No. 97-234; GC Docket No. 92-52; GEN Docket No. 90-264, 15 Comm. Reg. (P & F) 714, Appendix B Supplemental Final Regulatory Flexibility Analysis (rel. Apr. 20, 1999) (citing 13 C.F.R. § 121.201, SIC 4832).

[64] Comments of the Prometheus Radio Project, filed July 29, 1999, at 2 (proposing an exclusively noncommercial service).

[65] MEC Comments at 12 (proposing an 80 percent non-commercial reservation); Comments of the Low Power Radio Coalition, filed August 2, 1999 (proposing a non-commercial service, but with commercial licensees in communities that currently do not have stations).

[66] Comments of United Church of Christ, Office of Communications, Inc., National Council of the Churches of Christ, Communication Commission, General Board of Global Ministries of the United Methodist Church, Department for Communication of the Evangelical Lutheran Church in America, Civil Rights Forum, Libraries for the Future, and Consumers Union, filed August 2, 1999 20-25 (endorsing a noncommercial service, but finding certain merit in a commercial service) [hereinafter "Comments of the United Church of Christ et al."].

commercial advertisements,[67] and noncommercial service but without the ability to broadcast enhanced underwriting announcements.[68] While the LPFM supporters typically would provide licensing preferences to classes of potential licensees they believe are particularly deserving, there is no agreement on which classes should receive a preference[69] and how the preference might operate.[70] Beyond potential licensing preferences, there is no agreement on how licenses should be allocated, particularly among mutually exclusive applicants,[71] what qualifications a licensee

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[67] Additional Comments of The Amherst Alliance at 11 (proposing noncommercial status, provided "non-commercial" is defined not to mean "commercial-free").

[68] NFCB Comments at 10-11 (proposing to prohibit "actual or disguised solicitation for the benefit of " station underwriters; along with record-keeping and accounting requirements).

[69] See, e.g., Comments of the Alliance for Community Media at 1 (preference for public, educational, and governmental cable access providers); IBS Comments at 3 ("preferences should be given for existing Class D FM stations, closed-circuit, carrier, cable and other limited broadcasters"); Comments of Civil Rights Organizations at 64 (proposing a preference for minority broadcast training institutions); Comments of the American Civil Liberties Union of Massachusetts et al. at 7 (proposing preferences for "applicants who can demonstrate broad community support," applicants who will program in a language not otherwise available on the local radio dial, and educational or governmental institutions that submit plans for a "public access" program); Comments of United Church of Christ et al. at 27 (proposing preferences for churches, schools, libraries, community access organizations, and, secondarily, minority-controlled organizations).

[70] See, e.g., Comments of the United Church of Christ et al. at 27-30 (proposing a first track, allocating licenses to churches, schools, libraries, and community access organizations by comparative point system, and a second track, allocating licenses to minority-controlled organizations by lottery); Comments of Civil Rights Organizations at 64 ("[P]ropos[ing] a hybrid application acceptance procedure under which several sequential filing windows would be opened, with applications due on a first come, first served basis within each window.")

[71] See Comments of American Civil Liberties Union of Massachusetts et al. at 7 (proposing a system of pre-notification, prioritization, and accountability that apparently would always avoid mutually exclusive applications even among applicants with the same preference priority); Comments of the United Church of Christ et al. at 31-33 (proposing a system of filing windows and paper applications); NFCB Comments at 20 (opposing filing windows and proposing to resolve mutually exclusive applications by splitting the license term into equal blocks of years according to the number of mutually exclusive applicants); Comments of the Alliance for

must possess,[72] how many licenses one might hold,[73] how long one might hold a license,[74] whether a license may be transferred,[75] what other media interests a licensee might have,[76] what, if any, are the minimum program origination or other service requirements,[77] and what other of the FCC's

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Community Media at 6 (proposing the awarding of "priority points" to applicants providing the most "local programming" as well as based on the amount of "public interest programming" proposed); Comments of Civil Rights Organizations at 26-29 (advocating a first to file system with mediation and paper hearings to resolve contested cases).

[72] Compare NFCB Comments at 8 ("Eligible entities would be 'public telecommunications entities' as that is defined in the [Communications Act]") with Written Comments of Don Schellhardt, filed June 14, 1999, at 6 ("The LPRS will produce the best 'payoff for the public' if it consists of small stations, owned and operated by small institutions (and individuals) with a high degree of operational autonomy.") [hereinafter "Schellhardt Comments"].

[73] Compare Skinner Comments at 38 (proposing a national ownership cap of 6 LPFM stations and a local limit of 2 stations per "community") with Schellhardt Comments at 6 ("The Commission should STRICTLY limit LPRS licenses to one station each.")

[74] See, e.g., Revised Comments of REC Networks at 35 (proposing a 5 year renewable license); Comments of Wesle AnneMarie Dymoke, filed August 2, 1999 (proposing a 7 year renewable license); MEC Comments at 32 (4 year renewable license).

[75] Compare Comments of the Prometheus Project at 13 ("LPFM operators should be able to sell their equipment, but not their license to operate.") with Comments of Civil Rights Organizations at 26 (advocating a minimum license holding period).

[76] See, e.g., IBS Comments at 3 (proposing to permit educational institutions with existing Class A or higher stations to own 1 microradio station per campus); NFCB Comments at 8 ("[E]xisting noncommercial FM licensees [should] be able to apply locally."); Comments of the Prometheus Project at 15 (opposing the Commission's proposal to allow an AM licensee to apply for LPFM licenses upon divestiture of its AM station(s)); Skinner Comments at 37 (proposing to allow owners of AM stations with night-time power of less than 250 watts to apply for LPFM licenses subject to divestiture of their AM station); Comments of American Civil Liberties Union of Massachusetts et al. at 5 (opposing LPFM ownership by owners of any other mass media outlet).

[77] Comments of American Civil Liberties Union of Massachusetts et al. at 7 (proposing a 25 percent "local content" requirement); IBS Comments at 3 (proposing a minimum local program origination of 51 percent per week); Revised Comments of REC Networks at 31 (proposing local origination (or origination from a source within 50 km of the station) for at least 8 hours between 7:00 a.m. and 10:00 p.m. local time, Monday through Friday); Skinner Comments at 38 (opposing

existing broadcast regulations should apply.[78]

In short, the supporters of low power radio would each devise a system that favors and reflects their own particular interests and perspectives. While these articulations of self-interest are not surprising, cumulatively the diversity of proposals approaches the diversity of viewpoints the Commission hopes its LPFM initiative ultimately will offer the public. Thus, the Commission's proposal has functioned much like the communications policy equivalent of a Rorshach inkblot test. However interesting such an exercise may be, the question remains whether the Commission can reconcile all the competing interests and proposals and devise a comprehensive licensing scheme to unleash the sought-after programmatic and ownership diversity in a manner that satisfies LPFM proponents but without harming existing broadcast services. Assuming the question can be answered affirmatively, one point is abundantly clear: the Commission has just begun what can only be a long process.

Conclusion

For the foregoing reasons, and as more fully set forth above and in NPR's initial Comments, NPR urges the Commission to substantially revise, if not discard, its proposal to establish a low power FM broadcast service so as not to undermine the public's access to existing

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any local origination requirements); NFCB Comments at 10 ("oppos[ing] any restriction on the use of programs from any suitable source, including satellite feed").

For the record, CPB funded stations typically originate at least half of their weekly program schedule. See Highlights of the Public Radio Programming Study, Fiscal Year 1996, Research Note No. 105 (November 1997) (available at http://www.cpb.org/research/researchnotes/). Compare Reply Comments of WKJCE Radio at 10.

[78] See Comments of the United Church of Christ et al. at 16 ("Application of Title III [of the Communications Act] duties to low power stations is non-discretionary."); Revised Comments of REC Networks at 35 (proposing to substitute Internet notification for the Commission's current local public notice requirements).

public radio services.

Respectfully Submitted,

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